

openings or holes in the probe surface. This, however in most cases may not be practical. Naturally, the deeper the indentations or cavities and the larger surface area of the probe surface they occupy the better thermal insulation.

5 While particular embodiments of the invention have been shown and described herewith for an ear thermometer, it will be obvious to those skilled in the art that other medical probes and changes and modifications to the illustrated embodiment may be made without departing from the invention in its broader aspects, and, therefore, the aim in the appended claims is to cover all such changes and modifications as fall within the true spirit and scope of the invention.

### **Claims**

- 10 1. A probe of a medical instrument that is intended for insertion into a patient's body orifice, such probe has the outer surface which is shaped to contain at least one cavity.
2. A probe of claim 1 where said cavity is covered by outer skin that is permanently attached to said outer surface.
- 15 3. A probe of claim 1 where more than one cavities formed on said outer surface are separated by ridges.
4. A probe of claim 3 where said cavities are randomly distributed along said outer surface.
5. A probe of claim 1 is fabricated of material having low thermal conductivity
6. A probe of claim 1 further comprises a polymer probe cover that envelopes said outer surface.
7. A method of thermal insulation of a medical probe, comprising a step of forming indentations  
20 on the outer surface of the probe.
8. A method of thermal insulation of a medical probe of claim 7, further comprising a step of covering said indentations with a layer of protective material having low thermal conductivity.